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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/694,492 | 10/24/2000 | Rajesh Shah | 219.39026X00 | 9470 |
| 7590 | 10/21/2004 | | EXAMINER | |
| Schwegman, Lundberg, Woessner & Kluth, P.A. P.O. Box 2938 Minneapolis, MN 55402 | | | MYERS, PAUL R | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2112 | |

DATE MAILED: 10/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) |
|------------------------------|------------------------|---------------------|
| | 09/694,492 | SHAH, RAJESH |
| | Examiner | Art Unit |
| | Paul R. Myers | 2112 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 30 August 2004.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-22 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) Claim(s) _____ is/are allowed.
6) Claim(s) 1-22 is/are rejected.
7) Claim(s) _____ is/are objected to.
8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) Notice of Informal Patent Application (PTO-152)
6) Other: *requirement under 37CFR1.105.*

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 8/23/04 have been fully considered but they are not persuasive.

In regards to applicants argument that Golden teaches the elements must be upgrades: Golden was relied upon solely for its teaching a network map of all fundamental path elements including bandwidth capabilities of all links and switches along the path. When Golden performs the topology discovery (after an upgrade) is immaterial. Haley teaches the use of a request from a client for information on the properties of the fundamental path elements of a path. This is done "without modification of the path elements". The examiner further notes that Golden's topology discovery is also done "without modification of the path elements", it just is done after there has been a modification of the path elements.

In regards to applicants argument regarding the InfiniBand architecture specification: Applicants arguments make clear that the InfiniBand architecture specification is required for proper examination. A 37 C.F.R § 1.105 requirement is therefore being included in this action.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spiegel et al PN 5,649,108 in view of Haley PN 5,884,036 and Golden et al WO-99/53719-A1.

In regards to claims 1, 8 and 15-16: Spiegel et al teaches a method comprising: performing a topology discovery of a cluster that includes a plurality of ports (mapping); identifying all possible paths to each port from any other port (map); receiving a request from a client, (source) the request identifying a source and a destination of a path (Column 2 lines 39-41, 62-64 and Column 3 lines 31-36 and 62-67); and sending a response to the client based upon the request, the response identifying one or more links and switches between the source and the destination (Column 2 lines 39-41, 62-64 and Column 3 lines 31-36 and 62-67). Spiegel teaches the switches being ATM fabric switches. Spiegel et al does not expressly teach the requests including a request for information on the properties of the fundamental path element of a path or the properties being expressly of both the links and switches. Haley teaches receiving a request from a client for information on the properties of the fundamental path elements of a path (topology information request). It would have been obvious to include a topology information request in the system of Spiegel et al because this would have allowed for quick network topology determination. Golden et al teaches maintaining a network map of the paths as well as the bandwidth capabilities of all links and switches along the paths (Abstract). It would have been obvious to a person of ordinary skill in the art at the time of the invention to include the properties of the switches in the path because this would have provided for handling changes in switch bandwidth.

In response to claims 2, 11 and 17: Spiegel et al teaches selecting an alternate route.

In response to claims 3-4, 12-13 and 18-19: Spiegel et al teaches using the alternate route.

In response to claims 5, 10 and 20: Both Spiegel et al and Haley teach including Hop count and QOS.

In response to claims 6 and 21: Spiegel et al teaches the use of Virtual ID's.

In response to claims 7, 14 and 22: Spiegel et al teaches identifying the order the links are traversed (figures 6).

In response to claim 9: Spiegel et al teaches the source being a host.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Requirement for Information Under 37 C.F.R. § 1.105
Attachment to Paper No. 10/20/04

1. Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.
2. In response to this requirement please provide the InfiniBand architecture specification which the applicants have relied upon for arguments.
3. The fee and certification requirements of 37 C.F.R. § 1.97 are waived for those documents submitted in reply to this requirement. This waiver extends only to those documents submitted in reply to this requirement under 37 C.F.R. § 1.105 that are included in the applicant's first complete communication responding to this requirement. Any supplemental replies subsequent to the first communication responding to this requirement and any information disclosures beyond the scope of this requirement under 37 C.F.R. § 1.105 are subject to the fee and certification requirements of 37 C.F.R. § 1.97.
4. In responding to those requirements that require copies of documents, where the document is a bound text or a single article over 50 pages, the requirement may be met by providing copies of those pages that provide the particular subject matter indicated in the requirement, or where such subject matter is not indicated, the subject matter found in applicants disclosure.
5. The applicant is reminded that the reply to this requirement must be made with candor and good faith under 37 C.F.R. § 1.56. Where the applicant does not have or cannot readily

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obtain an item of required information, a statement that the item is unknown or cannot be readily obtained will be accepted as a complete response to the requirement for that item.

6. This requirement is an attachment of the enclosed Office action. A complete response to the enclosed Office action must include a complete response to this requirement. The time period for reply to this requirement coincides with the time period for reply to the enclosed Office action.



PAUL R. MYERS
PRIMARY EXAMINER

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul R. Myers whose telephone number is 703 305 9656. The examiner can normally be reached on Mon-Thur 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on 703 305 4815. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



PRM
October 20, 2004

PAUL R. MYERS
PRIMARY EXAMINER